

May 14, 2003

Carolyn Wright Governor's Office, Resource Development 1594 West North Temple Salt Lake City, UT 84102

Dear Ms. Wright:

On behalf of the Federal Highway Administration (FHWA) and Utah Department of Transportation (UDOT), this letter transmits the Final Environmental Impact Statement (EIS) for the Reference Post 13 Interchange on I-15 and Washington City Road, Washington City, Utah. The public comment period for this Final EIS will end on June 30, 2003.

Written comments can be provided to Sandra Garcia, Transportation and Environmental Engineer, Federal Highway Administration, Utah Division, 2520 West 4700 South, Suite 9A, S Lake City, UT 84118; telephone (801) 963-0182.

Sincerely,

Vincent Izzo

HDR Engineering, Inc.

NATURAL R SOURCES

HDR Engineering, Inc.

3995 South 700 East Suite 100 Salt Lake City, UT 84107-2594 9: (801) 281-8892 B01) 281-8693 hdrinc.com

# **Summary**

## **Description of Proposed Action**

The proposed Reference Post (RP) 13 project would consist of a new interchange on I-15 hout 13 miles northeast of the Arizona border in Washington City, Washington County, Utah. The project would include a 1-mile Washington City road to connect the interchange with Telegraph Road to the south of I-15. A pedestrian and bicycle trail might be developed by the city at 11 incorporated with the project.

The primary purpose of the RP 13 project is to enhance mobility throughout the city by distributing traffic more evenly on the road network with improved access to areas of existing and planned development in the east and south parts of Washington City according to the and use master plan. In addition, the project should relieve congestion delays and improve safety at the RP 10 interchange and adjacent intersections.

### **Other Major Actions**

The other major transportation actions in Washington City are the improvements currently being made to the RP 10 interchange. This interchange is being modified to improve existing trailfic delays and congestion at the interchange. The proposed Southern Corridor highway is in the process of being evaluated in an Environmental Impact Statement (EIS), but the highway would not likely be constructed during the same timeframe as the RP 13 project. Implementation of the Southern Corridor would not affect operation of the RP 13 project. Other non-roadway actions in the project area include implementation of the 61,022-acre Red Cliffs Desert Reserve for the protection of the desert tortoise and other desert habitat and wildlife and the Sand Hollow Reservoir.

### Alternatives Considered

For the screening process for the RP 13 alternative development, both the interchange type and location were evaluated. The interchange type best suited for the traffic volumes, traffic direction, and topography was a diamond interchange. Other interchange alternatives would not be well suited for the traffic volumes and would have a higher cost.

To determine the location of the proposed interchange, A Policy on Design Standards—Interstate System (AASHTO 1991) was used and areas of planned growth and topography were reviewed. The Policy on Design Standards recommends, as a rule, a minimum spacing of 3 miles in areas such as Washington City. With existing interchanges at RP 10 and RP 16, the minimum space would put the interchange at RP 13. Additionally, topography and residential development in the project area limit potential interchange locations to the east and west of RP 13. The interchange location at RP 13 would also provide beneficial access to areas planned for future growth in Washington City and would be consistent with the land use and transportation plans for the city.

### **Alternatives Studied in Detail**

This EIS evaluates two alternatives: the No-Build Alternative and the Preferred Alternative The Preferred Alternative is shown in Figure 2.2-2, Preferred Alternative.

#### **No-Build Alternative**

The National Environmental Policy Act (NEPA) requires that the alternative analysis include the No-Action (or No-Build) alternative. This alternative serves as a benchmark, enabling electsion-makers to compare the magnitude of environmental effects of the Preferred Alternative.

The No-Build Alternative in this case would consist of not constructing a second Washington City interchange at RP 13 on I-15. It would, however, include other transportation improvements in Washington City, including the planned improvements to the RP 10 interchange. The No-Build Alternative may also include the construction of new local roads by Washington City in the project area similar to the Preferred Alternative except without the interchange.

### **Preferred Alternative**

The Preferred Alternative would include a diamond interchange at RP 13 on I-15. The interchange ramps and weave lanes would start at RP 12.88 on the west and extend to R# 13.88 on the east. The proposed interchange would tie into a 1-mile city road that would connect to Telegraph Road. The city road would be built in two phases.

- Construction of Phase I would begin in 2003 and would include two 14-foot travel lanes with 8-foot gravel shoulders. Phase I would include all earthwork for a 106-foot light-of-way and a roundabout near the proposed interchange.
- Phase II would include an 8-foot bicycle lane on each side, four 12-foot travel lat ps, and a 16-foot center turn lane. Phase II of the road would be implemented when required by traffic demand in about 2008.

A city road north of the RP 13 interchange is not currently proposed and is therefore not analyzed in this EIS.

### **Summary of Alternatives Advantages and Disadvantages**

This section provides a summary of the advantages and disadvantages of the alternatives studied in detailed. Section 2.3, Summary of Predicted Environmental Effects of Alternatives, provides a summary of the environmental consequences of the No-Build and Preferred alternatives.

### **No-Build Alternative**

### **Advantages**

The major advantage of the No-Build Alternative when compared to the Preferred Alternative is that there would be no impacts associated with building the RP 13 interchange. As with the Preferred Alternative, it is likely that city roads would be built in the project area to supposit future development.

### Disadvantages

The major disadvantage of the No-Build Alternative is that it would not meet the project's purpose and need of relieving congestion at the existing Washington City RP 10 interchange and adjacent intersections. The No-Build Alternative also would not enhance access and mobility throughout the city by distributing traffic more evenly on the road network, would not reduce the number of accidents at the RP 10 interchange and adjacent intersections, nor would it separate heavy commercial and industrial traffic from residential traffic at these locations. Overall, is the

area continues to grow through the 2025 planning period, the No-Build Alternative would result in future increased congestion and delays. Analysis shows that the level of service (LOS) would reach noticeable congestion and the limits of when delays would not be acceptable during the planning period (see Table 1.6-2, 2025 LOS Summary without RP 13 Interchange).

#### **Preferred Alternative**

### Advantages

The major advantages of the Preferred Alternative are:

- Reducing delays and improving the LOS from D to C at the existing RP 10 interchange
- Reducing congestion and improving the LOS from E to B during the afternoon peak travel
  demand at the Red Cliff Drive and Telegraph Road intersection. The reduced congestion
  should result in improved safety at the RP 10 interchange an adjacent intersections
- Distributing traffic more efficiently throughout the city's transportation network, which should enhance mobility throughout Washington City and improve overall safety
- Separating heavy commercial and industrial traffic (such as trucks) around the RP 10 interchange from residential traffic
- Providing better access to areas of future development
- Being consistent with the Washington City land use plan
- Providing for a potential pedestrian and bicycle trail along the city road
- Improving the local economy

#### Disadvantages

The major disadvantages are summarized in Table S-1, Comparison of Environmental Impacts. These include:

- Faster change in land use from open to developed; more commercial land uses located next to existing residential areas
- Greater than 10 dBA increase in noise levels to existing residential areas
- More air, water, and noise pollution and higher energy consumption associated with indirec impacts from development of about 577 acres
- About 91 more acres of wildlife habitat indirectly impacted from development compared to the No-Build Alternative
- Potential impact on one historic and one prehistoric cultural resource site